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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,728	12/29/2001	Joseph Zeck	DCI-19C	4116
21833 7:	590 01/02/2003			
BOULDER PATENT SERVICE INC			EXAMINER	
1021 GAPTER BOULDER, CO			FULLER, ERIC B	
			ART UNIT	PAPER NUMBER
			1762	(-
			DATE MAILED: 01/02/2003)

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/040,728	ZECK ET AL.				
Office Action Summary	Examiner	Art Unit				
	Eric B Fuller	1762				
The MAILING DATE of this communication app Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl' - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. (D) (35 U.S.C. § 133).				
Status 1) ☐ Responsive to communication(s) filed on 23 (October 2002 .					
	is action is non-final.					
Since this application is in condition for allow	ance except for formal matters, p	rosecution as to the merits is	;			
3) Since this application is in condition for allow closed in accordance with the practice under Disposition of Claims	Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.				
4)⊠ Claim(s) <u>1-37</u> is/are pending in the application	٦.					
4a) Of the above claim(s) is/are withdra	wn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-37</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10) ☐ The drawing(s) filed on is/are: a) ☐ acce	epted or b) objected to by the Exa	aminer.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)⊠ The proposed drawing correction filed on <u>23 October 2002</u> is: a)⊠ approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in re						
12)☐ The oath or declaration is objected to by the E	xaminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C. § 119	(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
 Certified copies of the priority document 	nts have been received.					
Certified copies of the priority document	nts have been received in Applica	ation No				
Copies of the certified copies of the pri application from the International E See the attached detailed Office action for a list						
14) Acknowledgment is made of a claim for domes	stic priority under 35 U.S.C. § 119	e(e) (to a provisional applicati	ion).			
a) The translation of the foreign language p	rovisional application has been re	eceived.				
15)⊠ Acknowledgment is made of a claim for dome	stic priority under 35 U.S.C. §§ 1	20 and/or 121.				
Attachment(s)	4) T Interview Summ	ary (PTO-413) Paper No(s)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	al Patent Application (PTO-152)				
LLS Patent and Trademark Office		Part of Paper No	. 5			

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DETAILED ACTION

Drawings

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on October 23, 2002 have been accepted. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eslambolchi et al. (US 6,294,022 B1) in view of Peterman (US 4,387,340).

Eslambolchi teaches a hand-held apparatus that produces a spray painted mark on the ground to identify locations that have buried cables. The reference fails to teach how the buried cables are located.

Peterman teaches a hand-held apparatus that is used to detect buried cables by measuring the electromagnetic signal that it releases (column 2, lines 35-45). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use this apparatus to detect buried cables prior to paint

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marking the ground. By doing so, one would reap the benefits of accurately marking the ground in the required locations. Additionally, to supply both the marking elements and the detection elements described above in a single apparatus has been found to be obvious, see *Nerwin v. Erlichman* 168 USPQ 177 (PO BdPatApp 1969); *In re Wolfe* 116 USPQ 443 (CCPA 1958); *In re Howard* 150 US 164 (USSC 1893).

As to claims 2 and 3, Eslambolchi teaches that the supply of paint is from spray paint cans (column 2, lines 20-34). It would be obvious that the cans are replaceable.

As to claim 4, figure 1 of Eslambolchi shows that the operator is in the upright position.

As to claims 5 and 6, the apparatus of Eslambolchi teaches finger activation of the spray paints or any other suitable type activation (column 1, lines 50-59). To use foot activation means would have been equally obvious with the expectation of achieving similar results.

The limitations to claims 7, 8, and 9 have previously been addressed in this Office Action.

Claims 10-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eslambolchi et al. (US 6,294,022 B1) in view of Peterman (US 4,387,340), as applied to claims 1-9 above, and further in view of Rodgers et al. (US 6,064,940).

Eslambolchi in view of Peterman teaches the limitations of claims 1-9, as shown above, but fails to teach the configuration of the two elements (marking and detection) into one apparatus. However, Rodgers teaches an apparatus that has both detecting

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means and marking means lo located on the same apparatus that has the benefits of being able to be used by laborers of minimal training (column 1, lines 54-67). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to supply the detection and marking means taught by Eslambolchi and Peterman in a apparatus similar to that of Rodgers. By doing so, the detection and marking may be performed by a laborer with minimal training.

As to claims 10-13, Rodgers teaches the solenoid that is used to activate the spray mechanism (column 4, lines 8-15). One of ordinary skill would have the knowledge and skill to couple the solenoid to the spray mechanism in order to perform the marking properly.

As to claim 14, Rodgers teaches an LCD screen that monitors the battery level of the apparatus, among other things. This reads on the apparatus comprising a battery pack that powers the electronics and solenoid.

The limitations of claims 15 and 16 have been previously addressed in this Office Action.

As to claims 17-19, The LCD screen taught by Rodgers monitors many parameters of the process. It would have been obvious to one skilled in the art to monitor the actuations or the apparatus. Specifically to claim 19, it is the position of the examiner, absence evidence of criticality, that the exact switching pattern used by the operator to initiate marking is one of design.

The limitations of claims 20 and 21 have been previously addressed in this Office Action. The housings may be more easily seen in figure 3 of Rodgers.

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As to claim 22, figures 2 and 3 of Rodgers shows a hinge connected to both mechanisms (locator and marking device) of the apparatus (13). The apparatus is collapsible for easy storage. The first and second portions are moved relative to the handle when being collapsed.

The limitations of claims 23-30 have been previously addressed in this Office Action.

Claim 31 contains limitations that have already been addressed. Furthermore, the housing arrangement (A) may be seen in figure 2 of Rodgers.

The limitations of claims 32-37 have been previously addressed in this Office Action.

Response to Arguments

Applicant's arguments are drawn to rejections based on Marthaler et al. (US 4,738,060) in view of Peterman (US 4,387,340) and Rodgers et al. (US 6,064,940). These arguments have been considered, but have been considered but are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (703) 308-6544. The examiner can normally be reached Mondays through Thursdays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached at (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

EBF

December 30, 2002

SHRIVE Y. BECK SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700